REMARKS/ARGUMENTS

Favorable reconsideration of this application in light of the following discussion is respectfully requested.

Claims 11-22 are presently active in this case, no amendment or change in scope of the claims is contemplated by this Response.

In the outstanding Office Action, Claims 11-13, 15, 20-22 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. 2003/0172160A9 to Widegren et al.; Claim 14 was rejected under 35 U.S.C 103(a) as being unpatentable over Widegren et al. in view of U.S. 2004/0053606A1 to Artamo et al.; Claims 16 and 17 were rejected under 35 U.S.C § 103(a) as being unpatentable over Widegren et al. in view of WO 00/10357 to Haumont; and Claims 18 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Widegren et al. in view of U.S. 2002/0068588A1 to Yoshida et al.

Applicants first note that the prosecution in this case has centered around the features of setting priority for a transfer path between a base station and control apparatus, and transferring data in accordance with the priority set for the transfer path. Specifically, the Amendment filed July 30, 2007 amended the claims to emphasize the feature of setting a priority, and argued that the primary reference to Koistinen does not disclose this priority setting features.[1] This resulted in a new grounds of rejection based on the combination of Koistinen with the newly cited reference to Li.[2] Applicants' January 10, 2008 Amendment submitted a new set of claims again emphasizing the setting of priority and transferring data over a transfer path in accordance with the priority set, and argued that the combination of

[1] See July 30, 2007 Amendment at page 8, lines 11-13.
[2] See Final Office Action at page 6, item 7.

Koistinen and Li do not disclose this feature.[3] Further, Applicants' representative explained the priority setting feature in a personal interview on January 11, 2008.[4]

The outstanding Office Action now withdraws the rejection based on Koistinen and Li, and again provides a new grounds of rejection based on a newly cited primary reference to Widegren et al. Applicants respectfully submit that Widegren et al. also does not disclose setting priority for a transfer path between the base station and control apparatus in transferring data in accordance with the priority set (as will be fully discussed below) and thus the outstanding rejection ***has the same deficiencies*** as previous rejections which were withdrawn upon explanation. However, the present response does not amend the claims. While Applicants believe that this response should result in allowance of this case, Applicants first respectfully submit that since the present response traverses the prior art rejections without substantive amendment, any new ground of rejection in a forthcoming office action ***will not be necessitated by amendment and cannot be properly made final.***[5]

Turning now to the merits, Applicants' Claim 11 recites a radio access network system for transferring user data in a radio access network including a base station configured to communicate the user data with a mobile station via a radio channel and a control apparatus configured to control the base station. The mobile station is configured to transmit a transfer path setting request for requesting to set a transfer path of the user data, to a core network via the radio access network. The control apparatus includes a receiving unit configured to receive a transfer path assignment request for requesting to assign the transfer path of the user data from the core network, and includes a transfer path setting unit configured to set the transfer path of the user data in accordance with the transfer path assignment request. The control unit also includes a priority setting unit configured to set a priority with which the user data is transferred

[3] See January 10, 2008 Amendment at page 9, lines 3-12.
[4] See Interview Summary dated January 11, 2008.
[5] MPEP § 706.07(a)

over the transfer path of the user data set by the transfer path setting unit, and a transmitting unit configured to transmit, to the base station, a radio channel setting request for requesting to set the radio channel, the radio channel setting request including the priority.

Thus, Applicants' Claim 11 recites that the priority setting unit is configured to "set a priority with which the user data is transferred over the transfer path set by the transfer path setting unit" of the control apparatus, and is also configured to transmit to the base station a "radio channel setting request including the priority". Independent Claims 20, 21 and 22 provide method, system and control apparatus claims that include similar features for setting a priority for the transfer path between the base station and the control apparatus, and transferring user data in accordance with the priority set for the transfer path. As discussed in Applicants' specification, because TOS formats are different among IP packets and network nodes differ in the format that can be handled by the network node, priority transmission control of IP packets cannot be carried out in conventional systems.[6] Applicants' invention as claimed in independent Claims 11, 20, 21 and 22 can set the priority for the transfer path when setting the transfer path connection.

An example embodiment covered by Applicants' independent Claims 11, 20, 21 and 22 is shown in Figures 2A and 2B in Applicants' specification as originally filed. As explained on record in this case, these figures, and text relating thereto, show that when setting up a communication path, a core network receives a message from a mobile station indicating a traffic class for user data that the mobile station wants to transfer to the core network.[7] The control apparatus then determines a priority by looking up a priority corresponding to the received traffic class in a priority determination table T1, for example. The control apparatus sets priority information in memory tables such as T2 and T3 for

[6] See Applicants' published specification at paragraph [0014].
[7] See Applicants' specification at paragraph [0072].

example.[8] When user data is subsequently sent from the mobile station to the network, the network regenerates a packet including the user data and replaces an existing TOS field with a bit code representative of the priority previously set for the transfer path.[9] In this way, the radio access network can adapt to an environment in each network domain and can carry out the priority transmission control of IP packets in consideration of traffic requirements.[10]

The cited reference to Widegren et al. discloses a method for assuring end-to-end QoS for multimedia sessions between diverse networks. As seen in Fig. 1 of Widegren et al., the end users (user A and user B) of the multimedia session each have an associated LAN (105, 106) connected through an IP network 104. One of the LANs (105, 106) may be a 3G UMTS mobile network. During session set up between the networks, each of the users request confirmation from the other user that the other user's LAN can provide the QoS required for the session. Once each user confirms compatibility with the other user, the IP backbone supports the QoS of the data stream of each network without any need for resource reservation signaling such as Diffserv. However, Widegren et al. does not disclose setting a priority set for the transfer path and transmitting the data with this priority set as required by independent Claims 11, 20, 21 and 22.

The outstanding Office Action cites Figure 18 of Widegren et al. as teaching the priority setting feature. As seen in Figure 18, the mobile station requests a QoS by way of a PDP context request (step 2), and the SGSN returns an assignment request with negotiated QoS attributes. These steps of Widegren et al. are similar to messages 5 and 6 shown in Figures 2A and 2B of Applicants' specification. However, the Widegren et al. process subsequently determines radio related parameters based on the QoS profile (mapping in step 4) and sends these parameters to the mobile station (step 5) where the mobile station can

[8] See Applicants' specification at paragraphs [0077]-[0078].
[9] See Applicants' specification at paragraphs [0089]-[0093].
[10] See Applicants' specification at paragraph [0015].

accept the negotiated QoS and return a setup complete message signaling that the mobile station is ready to send traffic (step 6). These steps 4-6 in Widegren et al. in no way correspond to the priority determination and setting steps S102-S104 in Figure 2B of Applicants' specification. As discussed on record in this case, one example of setting priority is by use of a lookup table stored in the control apparatus, which correlates a traffic class with priority. Even if the radio related parameters "implicitly carry priority of the data" as the Office Action states, Widegren et al. does not include any priority determination and setting within the UTRAN. In fact, unlike the priority setting process in Figure 2A of Applicants' specification, the mapping and radio bearer setup steps 4 and 5 in Widegren et al. involve the mobile station. That is, with the present invention, the priority is set for the transfer path, and the priority is not set for the specific mobile stations (i.e., between end to end points), as in Widegren et al.

Thus, Widegren et al. does not teach setting a priority for the transfer path between the base station and control apparatus in transferring user data in accordance with the priority set for the transfer path as required by independent Claims 11, 20, 21 and 22, and therefore Widegren et al. cannot anticipate these claims. As noted above, Widegren et al. merely discloses determining the radio-related parameters by confirming QoS assurance between end-to-end user terminals.

The secondary references to Artamo et al., Haumont and Yoshida et al. are cited for teachings of the dependent claims the rejection of which relies on the teachings of Widegren et al. as noted above. Therefore, the secondary references do not correct the deficiencies of Widegren et al. and independent Claims 11, 20, 21 and 22 patentably define over the cited references. As Claims 12-19 depend from Claim 11, these claims also patentably define over the cited references. Nevertheless, Applicants submit that these dependent claims provide a further basis for patentability over the cited references.

Specifically, Claims 12 and 13 recite that the priority is set based on a traffic class, and Claim 14 recites that priority is set by referring to a priority determination table. Independent Claim 11 similarly recites setting priority in accordance with a traffic class. Widegren et al. does not disclose setting priority information based on a traffic class as recited in Claims 11-14 and does not disclose adding the priority to a packet as recited in Claims 15-17. Finally, Widegren et al. does not disclose specifying priority by referring to a transfer table as recited in Claims 18-19. The secondary references do not correct these deficiencies, and thus Claims 12-19 provide additional bases for patentability over the cited references.

Consequently, in view of the present response, no further issues are believed to be outstanding in the present application and the present application is believed to be in condition for formal allowance. An early and favorable action is therefore respectfully requested.

Respectfully submitted,

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